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April 30, 2008

Ms. Mary Nichols, Chair
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

RE: CCEEB's view of the meaning of the phrase "Maximum Technologically Feasible and Cost Effective" as used in the California Global Warming Solution Act, AB 32 of 2006

Dear Mary:

As the California Air Resources Board continues its work developing a Scoping Plan to implement AB 32, the California Council for Environmental and Economic Balance (CCEEB) offers the following comments to assist CARB in providing clarity to the significant operating phrase of "maximum technologically feasible and cost-effective."

Background

Based on the text of the California Global Warming Solutions Act (AB32), CCEEB believes that the state recognizes that cost effectiveness and "maximum technologically feasible" policies are needed to find the best way to achieve the mandated reductions on an economy-wide basis that do the best to reduce emissions at the least economic impact to Californians. For example, the phrase "maximum technologically feasible and cost-effective" appears six times in AB 32. The term "cost-effective" by itself, or in conjunction with maximum technologically feasible, appears 10 times in reference to greenhouse gas emissions reduction efforts. If interpreted individually, each element of this phrase would lead to directionally opposite results. Therefore, we must believe that the legislative intent behind the joining of these seemingly opposite concepts is to moderate the interpretation of either element of the phrase. Therefore, we believe that maximum technologically feasible must be interpreted in conjunction with cost effective. In any event, it is clear that achieving the emission reduction standards of AB 32 should be done in a manner conducive to imposing the least cost upon California residents, minimizing leakage and providing regional, national and international leadership in reducing greenhouse gas emissions.

Maximum Technologically Feasible

The term "maximum technologically feasible" is not specifically defined in AB 32. It is possible however, through logical construction, to develop a sense of the meaning of the term in the context of AB 32.

The Scribner-Bantam English Dictionary defines maximum as, "greatest number, quantity, or degree possible." The most frequently used definition of feasible in an environmental context (and the one that has stood the test of time and litigation) is contained in the CA Environmental Quality Act (Public Resource Code Section 21061.1) as "Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors."

It would appear that we can construe the meaning of maximum technologically feasible for AB 32 purposes as: the greatest amount of emissions that can be delivered by technical processes that are capable of being accomplished in a successful manner over a reasonable period of time, taking into account economic, environmental and social factors. This should not be confused with employing non-existent technology or unproven technologies that may be difficult or impossible to sustain in any situation, and whose resultant costs and benefits are unknown.

Cost-effective

Cost-effective or cost-effectiveness is defined in Section 38505(d) of AB 32 as "the cost per unit of reduced emissions of greenhouse gases adjusted for its global warming potential." The recognized international unit of measurement for greenhouse gases adjusted for its global warming potential is CO₂e (i.e., equivalent) in metric tons. It would follow that the total cost (in dollars) of a reduction effort divided by the resultant number of metric tons of CO₂e reduced would result in a \$ cost per ton figure. This can then be compared to the \$ cost of other CO₂e reduction efforts computed per the definition. This metric provides the economic consequence of GHG emission reduction actions per the stated definition, whether it is derived from compliance with command and control regulations or adherence and participation in a cap and trade market mechanism.

CCEEB believes the definition for cost-effective specified in the statute should be adhered to and the cost per unit of reduced emissions of greenhouse gases adjusted for its global warming potential should be calculated for all prospective emission reduction measures, including market based approaches. These measures (i.e., individual command and control, comprehensive cap and trade or a hybrid approach) could then be prioritized in terms of cost effectiveness per the definition. The measures should not exceed a threshold value. This threshold value should be established by CARB at a level that has relatively strong universal support. It could be the EU price of carbon, the world price of carbon as established by some unilateral authority or the average price of carbon in a variety of trading programs over an agreed upon period of time. It could also be the

carbon adder adopted by the CPUC for use by the investor owned utilities in evaluating their long-term procurement contracts.

Once this dollar threshold value per metric ton is established and adjusted periodically as necessary, all command and control measures mandating particular reductions, irrespective of sectors, can then be compared with one another. A mandated emission reduction scheme that is calculated to cost \$1,000 per metric ton would clearly not be cost-effective if the standard value established for the price for carbon is, say, \$50 per metric ton. This would certainly be the result in a market program where the least cost emission reduction would consistently be chosen for implementation over a more costly mechanism.

The Phrase as a Whole: Maximum Technologically Feasible and Cost Effective

When the term "maximum technologically feasible" is coupled with the defined term "cost-effective," as it is in the Global Warming solutions Act, a test of economic viability as calculated by the Act's defined metric of the \$ value of metric ton CO₂e reduced is introduced that buffers the extent of technological forcing that could be associated with the term maximum technologically feasible. The choice of the appropriate threshold value of this metric is critical to achieving the equity and fairness sought by AB 32 and the other values of AB 32 implementation cited in the Act to minimize leakage and achieve the necessary emission reductions at least cost.

Thus, CARB's assessment of cost effective technological feasibility for GHG emission reduction strategies should be expected to be similar to that which has been applied in the recent past to traditional regulations: 1) a given mitigation strategy has been successfully demonstrated in the same or very similar application...that is cost effective; 2) a mitigation strategy has been demonstrated in a related application such that technology transfer is plausible...and is cost effective; or 3) with further advances and a sufficiently ample phase-in period, existing technologies will offer an effective mitigation strategy ...that is cost effective.

Summary

AB32 is not designed to be a new technology-forcing or innovation program with wide ranging economic impacts across California's residents. Rather, it is an emissions mitigation program that mandates that GHG emitting sectors of the California economy control and reduce GHG emissions in the least costly manner possible to California residents.

In addition, all sectors are expected to contribute to statewide reduction of their fair share of GHG emissions. In order to effect a significant reduction in GHG emissions this effort will cause all sectors of the economy to pay the costs of these reduced emissions. It is clearly incumbent on those responsible to implement AB 32 to interpret "maximum technologically feasible and cost effective" in a consistent, fair and objective manner against a universally supportable standard dollar value per metric ton of CO₂e emissions

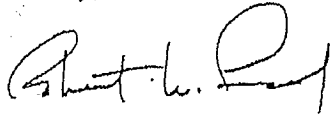
reduced so that costs are minimized and spread equitably across California residents and the California economy as a whole.

The responsibility that CARB has been given under the provisions of AB 32 is to design a program that is effective and whose costs to California residents are minimal, and do not border on the excessive or extreme. CCEEB urges CARB to adhere to the cost effectiveness definition as provided in Section 38505(d) in its analyses of all measures including individual command and control, market based or hybrid approaches.

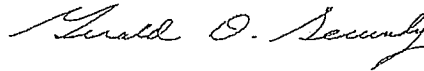
California alone cannot be expected to reduce GHGs to a level that will affect global climate change on its own. It can, however, play a very significant and effective leadership role in the design and implementation of effective programs for other states, regions and nations to follow and emulate. In all attributes, these programs must be achievable at least cost, least economic disruption and minimal leakage.

Thank you for your consideration of this matter. If you would like to discuss this further, please contact Bob Lucas at 916-444-7337.

Sincerely,



Robert W. Lucas
Climate Change Project Manager



Gerald D. Secundy
President

cc: Members of CA Air Resources Board
James Goldstene, Executive Officer, CA Air Resources Board
Linda Adams, Secretary, CA Environmental Protection Agency
Cindy Tuck, Undersecretary, CA Environmental Protection Agency
Eileen Tutt, Deputy Secretary, CA Environmental Protection Agency
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